

I Claim:

1. A climate control system in a vehicle, the system comprising:

5 a duct having a bend, said duct directing a flow of air to a passenger compartment of the vehicle;

a blower fan coupled to said duct upstream of said bend;

10 a set of radial vanes in said duct, said vanes protruding inwardly into said flow of air in said duct, said flow caused by operation of said blower fan, said vanes located downstream of said fan and upstream of said bend, said vanes reducing noise otherwise caused by air flowing around said bend.

15 2. The system of claim 1 wherein said bend in said duct is between approximately a 30 to 90 degree bend.

3. The system of claim 1 wherein said bend in said duct is between approximately a 45 to 90 degree bend.

20 4. The system of claim 1 wherein said duct is made from a polymeric material.

25 5. The system of claim 1 wherein said vanes are made from a polymeric material.

6. The system of claim 1 wherein said duct and said vanes are made from a polymeric material, said vanes being integrally formed in said duct.

30 7. The system of claim 1 wherein said vanes form a grid pattern.

8. The system of claim 7 wherein said vanes form a honeycomb grid with holes approximately 5mm by 5mm, and 10 mm thick.

5 9. The system of claim 1 wherein said vanes comprise a grid pattern that extends over an entire cross-section of said duct.

10 10. The system of claim 1 wherein said vanes are approximately 10 to 15 mm wide.

11. The system of claim 10 wherein said vanes are approximately 1.5 mm thick.

15 12. The system of claim 1 wherein said vanes protrude only partially into said duct and do not span across said duct.

13. A climate control system in a vehicle, the system comprising:

20 a plastic duct having a bend, said duct directing a flow of air to a passenger compartment of the vehicle, said flow used for carrying heated air and air-conditioned air depending on operating conditions;

a blower fan coupled to said duct upstream of said bend;

25 a set of radial plastic vanes integrally formed in said duct, said vanes protruding inwardly into said flow of air in said duct but not spanning across said duct, said flow caused by operation of said blower fan, said vanes located downstream of said fan and upstream of said bend, said vanes reducing noise
30 otherwise caused by air flowing around said bend, said air flowing to said passenger compartment after flowing around said bend.